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COVER

Hycroft Towers, Vancouver, British Columbia
Semmens & Simpson, Architects
Photo by *Graham Warrington*

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ROYAL ARCHITECTURAL INSTITUTE OF CANADA

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EDITORIAL

WE HAVE JUST HAD OCCASION to study the *Journal* for January and February, 1925, when its success, after two years of struggle, warranted publication every second month. It is a slim *Journal*, but it had a personal touch that we have somehow lost. Five associations and two chapters report their annual meetings with the Quebec meeting recorded in English and in French. One is happy to see the names of architects whose record of service to the profession extends, in an unbroken line, to our own day. Many of them are gray haired, but it is a marvel that they are alive at all when one looks back on a long series of monthly lunches followed by speakers on subjects like "Reinforced concrete construction in winter weather", and "Oil burning for domestic purposes". We remember suffering acutely after such a lunch when the speaker addressed us on "Unusual drain problems in architectural practice". We have always felt that such topics, while not unconnected with the digestive process, were unsuited to a luncheon gathering of a profession such as ours. However, in 1925, these monthly meetings were once part of the professional life of the architect, and their appearance in print in the *Journal* must have been eagerly followed by chapter secretaries seeking inspiration, and speakers. On the whole, we prefer the dull meeting to the circus we witnessed some years ago when we represented the RAIC at a huge gathering in another country. We were about to speak, not too ponderously, we hope, on architectural criticism, when a woman sang "Let me call you sweetheart", and the person introducing us ended his remarks with a most questionable story that cast grave reflections on the legitimacy of the guest speaker.

But to return to the purer air of the *Journal* of 1925. We miss, in the columns of today, those references to the activities of members and committees. Indeed, if we were writing about the "worthies" in architecture in Canada, and their contribution to the profession, we would not go to the *Journal* to find them. We do not know when the custom of sending the reports of the annual meetings of provincial associations was discontinued, but their publication should be one of the chief functions of the *Journal*. Nor do we mean that they should be reported in provincial newsletters. A whole page might well be devoted to an important meeting, and the Editorial Board would be glad to supply it.

The chief function of the *Journal* has always been the illustration and description of buildings, and the publication of articles on architecture and the allied arts. It must have been assumed by the founders of the *Journal* that buildings would be, for the most part, Canadian buildings, and that articles, where possible, would be written by Canadian architects. We believe this to be no narrow view, especially in an age where the Canadian architect may subscribe to half a dozen excellent foreign publications. The *Journal* has frequently, as in this issue, reprinted outstanding articles from magazines that are not received in the average office. This, we shall continue to do, but the obtaining of articles by Canadian architects is still of paramount importance to the Editorial Board. Years ago, the *Journal* passed the point where urgent requests went forward to the provincial associations for photographs of buildings. We have no difficulty in procuring photographs, but in periods of boom the creative urge finds its outlet in building rather than in writing. An editor's life is not a happy one because we remember the depression when a dearth of illustrations was matched by a wealth of articles. In our present extremity, we pray that all provincial association secretaries send us reports of meetings, either annual, biannual or biennial, and that architects particularly young architects, who have not lost the habit of writing, will, occasionally, and for an hour or two, turn their pencils into typewriters.

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The wrong turning

J. M. Richards

IT HAS BECOME a commonplace of architectural writing to number the Crystal Palace among the pioneer works of modern architecture. But a pioneer, by definition, is one who treads out a path for others to follow. And who followed in the path Joseph Paxton trod in 1851 across the grass and among the dramatically reprieved elm trees of Hyde Park? No one at all. The principles he enunciated, the discoveries at which he hinted, were reached independently generations later, and on the Continent rather than in England. Only after these principles had become firmly established was the Crystal Palace, as it were, posthumously beatified. It was then adopted by the modern movement rather as the newly rich adopt an ancestor who came over with the Conqueror.

This is not to say that the Crystal Palace as an historic landmark is a fraud. For though it cannot honestly claim to be the first embodiment of one movement, it can claim equal eminence as the last embodiment of another; indeed it was the climax of one of the most remarkable episodes in English architectural history, the period of monumental engineering which followed the industrial revolution and illuminated the early part of the nineteenth century with the one clear steady light that shone among the flickering parti-coloured fires of the battle of the styles. With the closing of the Great Exhibition this light was extinguished. It would be interesting to discover why.

One should begin perhaps by defining more exactly the special qualities of the episode in question. For seeing the Crystal Palace and the series of great engineering works that preceded it from a fair distance and from the standpoint of our more self-conscious age, it is easy for us to exaggerate their intrinsic architectural virtues and credit them with aiming at effects they only achieved by accident. Because of everything that has happened in the last hundred years we set special store by the forthright simplicity of statement that we find, for example, in those great brick warehouses surrounding some of the London, Bristol and Liverpool docks; the airy curves of Telford's and Brunel's suspension bridges arouse a ready response in minds eager to appreciate the elegance that resides in structure unadorned, and our knowledge that the Crystal Palace was prefabricated in standardized components leads us, by whom the potentialities of prefabrication are cherished, to regard it with special sympathy. We have to guard, therefore, against putting our own predispositions into the minds of our great-grandparents. In some instances, what to us is an unanswerable demonstration of the power of functionalism may have been to its author but the necessary outcome of expediency; and the structures whose simplicity we admire may have been left unadorned, not because they were thought to gain æsthetically thereby but because they were not thought worthy subjects for æsthetic consideration.

Nevertheless, much of the work of the early nineteenth century engineers has beauty and a grand simplicity and power. It does not matter that some of these attributes were not consciously sought after, for the qualities achieved by apparent afterthought are often those that mature best, because they rise from a deeper source – are the fruit of a more intuitive process – than mere cleverness on the part of a designer. The passing of time, moreover, adds authority to every building in the creation of which the natural ferment of the period it belongs to has taken an active share. The race of great engineers– Rennie, Telford, the two Brunels, Robert Stephenson and Paxton – and the others who supported the tradition these built up, have at least this in common: they were all inspired, consciously or unconsciously, by such a ferment. Their work is pervaded by a sense of conquest and, what is more, by a sense of moral obligation to put the conquered territory of science to productive use.

In *Art and the Industrial Revolution,* Mr F. D. Klingender quotes these lines from Wordsworth's *Excursion:*

"Casting reserve away, exult to see
An intellectual mastery exercised
O'er the blind elements; a purpose given,
A perseverance fed; almost a soul
Imparted – to brute matter. I rejoice,
Measuring the force of those gigantic powers
That, by the thinking mind, have been compelled
To serve the will of feeble-bodied Man."

To impart soul to brute matter is to exercise a God-like power, and the engineers of the early nineteenth century can hardly have avoided feeling that circumstances had given them the status of supermen. In this they were supported by the public they worked for, by whom all the apparatus of the new industrial age was regarded with awe and reverence. For it was a symbol of steady progress towards that final control of the natural forces of the universe which was implicit in the philosophies of the post-renaissance world and about which no misgivings had yet been felt.

The crowds that descended, chattering and admiring, into the Thames tunnel in the eighteen-forties and made its uncompleted length a popular promenade, the crowds that flocked on Saturday afternoons to watch the gangs of Irish navvies toiling like ants on the slopes of the great railway embankments – captive mountains, destined to bear the new machines on their shoulders – were not mere idlers enjoying the pleasure of watching others work. They were participating in a ceremony of worship. They were moved by the opportunity given them of vicariously exercising civilization's newly won power of controlling mighty engines with a touch of the finger.

Here is a typical nineteenth-century comment.* It concludes an account of one among hundreds of railway engineering feats that drew spectators in their thousands – the blasting away of Round Down Cliff to enable the South-Eastern line to reach Folkestone. An eager multitude assembled hours before the explosion was due and could hardly contain their excitement when it took place. Then

"the moment the headlong course of the chalk had ceased, and the hopes of the spectators were realized, a simultaneous cry arose of 'Three cheers for the engineer!' and William Cubitt was honoured with a hearty huzza from the lips of a grateful people. An era in the history of engineering had passed, and a precedent had been established, the results of which none could anticipate. It had been demonstrated that the most powerful and mysterious agency in nature was under computable regulations, and in no small degree under the control of science."

The hard-headed materialism of the nineteenth century was thus warmed with a sense of wonder. Its products acquired a spiritual significance akin to that which science itself had possessed in the early days of the renaissance when it first revealed a rational pattern latent in the incomprehensible world. The sense of wonder was lost in the matter-of-fact age that followed – no place was allowed for it in the neat Newtonian universe – but a romantic age discovered it again and obtained a dual satisfaction from the exercise of two complementary processes: from contemplating wild nature and from pursuing the means of taming it. Mr Klingender calls the years when the industrial revolution was being consolidated, the Age of Despair. In justification he quotes Shelley's reference, in his preface to *The Revolt of Islam* (1817), to "a general state of feeling among civilized mankind produced by a defect of correspondence between the knowledge existing in society and the improvement or gradual abolition of political institutions". To this feeling Shelley attributes the excesses of the French Revolution and the general atmosphere of despondency accompanying the Napoleonic Wars, and Mr Klingender elaborates the analysis by discovering an equivalent defect of correspondence between knowledge and *economic* institutions. It is true enough that material progress at this time was accompanied by a dislocation of the economic basis of society that brought misery to a large part of Britain's rapidly swelling population – that, for example, the new power of industry still depended fundamentally on a single machine: the over-driven bodies of men and women and even children. Yet to call the whole age one of despair misrepresents its latent spirit, and overemphasizes what were only transitional attributes; to the technicians and engineers and many besides it was one of optimism and uplift. The admiration that the advance of science evoked went deeper than its merely material achievements warranted. Sir Walter Scott, surely the monarch of the romantics, is quoted by Southey as describing Telford's Cysylte Aqueduct on the Ellesmere Canal as "the most impressive work of art he had even seen".

One speaks of this and similar engineering works as belonging to a single movement, but in fact their creators were not consciously co-operating in pursuit of one idea. What they had in common was a tension that kept their imagination at full stretch. This was produced not only by the sense of mission that supported them in all their endeavours but by the fact that they were still pioneers. They worked empirically. As well as creating the magnificent structures we admire as finished works, they improvised the methods of organizing and building them, inventing, as they went along, machinery of a kind that the modern engineer accepts ready made. Telford himself designed the method of testing the tensile strength of the chains to be used on the Menai Bridge. Robert Stephenson exercised his ingenuity not only on the design of the Britannia Bridge but on the machinery for lifting the tubular sections into place. The engineer was a man of parts, for the age of specialization was yet to come. He was a Titan who carried the burden of enlarging knowledge itself on his shoulders. His was not only an art of applying means to an end; he created the means, and the ends were only defined by such limitations of his own powers as he chose to acknowledge.

Conversely the termination of this great engineering epoch did not come because the demand for its products ceased, but because the engineer's task became a more pedestrian one as rule of thumb methods replaced the old inspired improvisations. There was no longer the same emotional driving-force. But architecture could have supplied a new driving-force. The consciousness of striving after a visual ideal, of bringing to a delectable ripeness the fruit of science's newly unleashed powers, could have taken the place of the pioneering spirit of primitive engineering. In the past architecture has managed to assimilate new ideas when they have suddenly come to dominate a whole epoch, and has turned them to good account. But this time the chance was lost. Architecture took a different turning.

It is not unreasonable to call the work of the great engineers the truly creative architecture of the nineteenth century because its development took place within the main stream of architectural evolution, whereas the architects' architecture of the same period, whatever feeling and ability it shows, whatever its charm, developed with few exceptions outside it. The engineers found inspiration in the thing itself. The architectural movements that inherited their popularity – the Gothic Revival and the rest – found it in literary ideals and the creation of symbols. Often they were symbols of the wealth that was being amassed with the aid of the same new science that inspired the engineers. The glorification of wealth and commercial prestige, such as we see in the great stone palaces of Manchester described by Professor Hitchcock (*The Architectural Review*, February, 1949) is a perfectly legitimate stimulus to architectural evolution. The Gothic cathedrals,

*F. S. Williams. *Our Iron Roads*. London, 1852.

it has often been explained to us, rose into the sky for the glorification of God. And if God can be so served architecturally, why not Mammon? The difference is that whereas religious fervour in the Middle Ages was perfectly united with the creative engineering that gave it form, in the nineteenth century the pride of commercial expansion became separated from the pride of engineering achievement.

The engineering opportunities might otherwise have been the means of stabilizing and reinvigorating the whole of architecture, at the crucial moment when the classical tide, of which the Greek Revival was the last surge forward, had begun to ebb and to give place to the formless impulses of the Romantic movement. The tragedy was, in fact, that the Romantic movement too soon lost sight of the very achievements it had best reason to be romantic about. This age of missed opportunities saw glimpses of a happier future when an architect as accomplished as Decimus Burton achieved classical elegance with iron and glass in the Palm House at Kew, or when an engineer as ingenious as Rennie used the fashionable Doric order on Waterloo Bridge to enhance as well as adorn the vigour of his structural conception. But the seed they sowed bore no fruit. Technical progress, its function narrowed by a premature specialization, instead of reanimating both of them, provided grounds for a divorce between architecture and engineering that has lasted to this day.

The moral to be drawn from this episode, which ended almost exactly a century ago, is the one to which we have long paid lip service but little more: that modern architecture, having been reinvigorated by the injection of new technical knowledge, new materials and new methods of producing them industrially, has a second opportunity of keeping the style of its outward expression fired with the spark of technical vitality. Now that all the talk is of the rehumanization of architecture after the discipline of the thirties, there is clearly the possibility of architecture again being led, by its most devoted adherents, up a wrong turning. The post-war search for colour and cosiness, for the means of attaining a new monumentality, could once more result in separation of the thing itself from the pictorial symbols associated with its popular success. In the same way that the static engineering of the nineteenth century was betrayed into supporting the grandiose fantasies of costume architecture, the dynamic engineering of the twentieth is liable to be side-tracked into the barren pretensions of streamlining or the dead end of neo-romanticism. The alternative is not a new puritanism, but the development of a humanized vernacular on the basis of the emotional fusion, which the nineteenth century failed to achieve, between the sciences and the arts. It is not impossible that the great social opportunities represented by such undertakings as the New Towns may serve the same function as the railway and canal building undertakings of a century ago, and inspire another generation of designers with the sense of mission that inspired the early nineteenth-century engineers.

These engineers combined material achievement with a poetic vision of a kind to which the English have always been susceptible. As early as 1802 the poet* who most completely embodies that vision and the inner conflicts it strives to resolve wrote what might well be their epitaph. Although he disapproves of "enlisting the imagination under the banner of science," he declares his faith in an alliance between the two which was not fully attained in his time but could still be in ours:

"If the labours of men of science should ever create any material revolution direct or indirect, in our condition, and in the impressions which we habitually receive, the Poet . . . will be ready to follow the footsteps of the Man of Science, not only in those general indirect effects, but he will be at his side, carrying sensation into the midst of the objects of science itself."

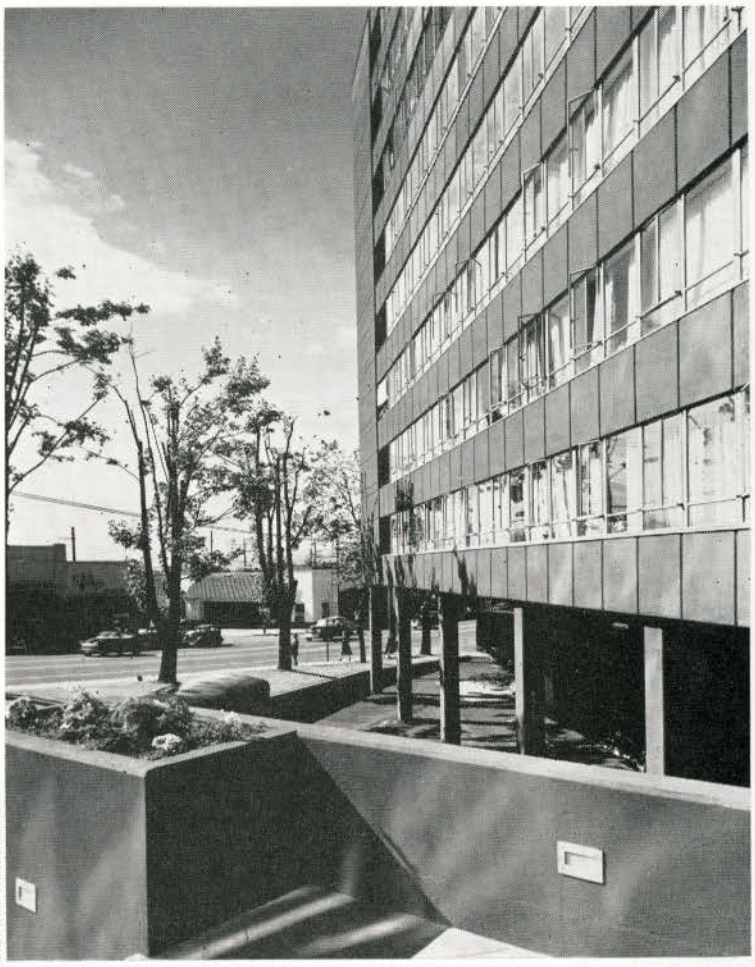
*Wordsworth in his *Preface*.

Hycroft Towers, Vancouver, British Columbia

Semmens & Simpson, Architects

Safir Engineering Consultants Ltd., Structural Engineers

Marwell Construction Company Ltd., General Contractors



GRAHAM WARRINGTON

THE PROPERTY EXTENDS 233 feet south along Granville Street as it starts its climb – at a 7 per cent grade – up to the exclusive residential district of Shaughnessy Heights. The north line extends 352 feet east from Granville along 15th Avenue's initially shallow but finally steep grade. Marpole Avenue completes the site's periphery. It sweeps east from Granville with only a small upward and then downward gradient, along the contour of the slope, in a slight crescent merging at the eastern edge of the property with 15th Avenue which has risen to meet it.

Therefore in addition to its unusual outline the site has varying levels. The corner of Granville and Marpole is 21 feet above the corner of Granville and 15th Avenue; the building's main entrance on Marpole Avenue is 31 feet at the sidewalk line above the latter corner – this being the maximum difference in grade.

The architects have exploited the site's possibilities as well as incorporating in their design a method of interior space division aimed at revenue maintenance under varying conditions.

They have taken advantage of the difference in grade to achieve a most desirable arrangement for traffic flow. Wheeled and pedestrian traffic, revenue as well as service, move with maximum convenience from the viewpoint of separation of traffic, accessibility from street levels, and access to the fine South Granville shopping district nearby.

The unusual shape of the site with its absence of party-boundary lines was capitalized on by a three-wing design oriented to achieve maximum light and air. This design, together with the block's height of 10 stories above Granville and 15th Avenue and 6½ stories above Marpole, took full advantage of the building's ideal location to give all tenants an unobstructed view of interesting or scenic value. In fact, the site's ideal location warranted its use even had the project involved greater engineering problems than were actually met on the job.

The Vancouver firm, Marwell Construction Company Ltd., were general contractors on Hycroft Towers. Safir Engineering Consultants Ltd., Vancouver, did the supervision for the architects and general contractors on earth removal and retention, foundation, stresses, and similar work.

In describing the work on Hycroft Towers, Mr Safir, the engineering consultant, said:

"We cut the bank back to a stable level by the removal of about 9000 yards of dirt. The building projects over the bank so that the horizontal forces are reduced to a minimum. The resulting dead-air space under the building's south side is more extensive under the east than under the west wing. In the former the south corridor-wall enters the bank's slope at first-floor level – above the ground and semi-floors. The north corridor-wall enters at semi-floor level, about 9 feet lower. Thus, under this east wing the bank remains unexcavated below these points.

"Throughout the building," Mr Safir continued, "the corridor walls are the sole bearing walls. In the west wing these walls remain above ground right to the ground level. The north wing is, of course, vertical to the bank and extends at right angles from the center of the other wings.

"Standard practice was followed in providing expansion and contraction joints between the cages of the three wings, except that these joints also take care of any possible settlement as between the wings. To this end, the slab portions connecting the wings were put in last, recesses having been left in the concrete work for this purpose. Actually, however, there has been no measurable settlement."

In the north wing the eight stories above the ground and semi-floors are almost uniform in designs and are entirely devoted to apartments. The ground and semi-floors in this wing have no outer walls – thus exposing the supporting columns of the outer walls above. These two outside rows of columns, with the centre row of wide rectangles carrying the bearing corridor-walls, mark off covered driveways along each side of the wing serving the building, garage, and parking facilities.

The open semi-floor is carried on concrete beams over the east driveway at a vertical clearance of 8 feet. It extends partway over the west driveway on tapered supports cantilevered to the center row of columns. Its western edge is finished with a heavy concrete parapet; its eastern edge, with only an expansion joint between, merges into a parking deck which covers the entire area between the north and the east wings.

This parking deck is carried on concrete columns and beams and forms the roof of the ground-floor parking garage, reached down a concrete ramp. The deck is shielded from the north by a heavy ornamental concrete fence rising along the slope of 15th Avenue. Total parking space is for 104 cars, including deck, semi and ground floors. The ground floor also houses a service station and all-weather unloading bays.

Under the east wing the semi-floor forms a covered extension of the parking deck. There is no ground floor here – the bank remaining unexcavated beneath this extension and beyond its wall which bears the north corridor-wall of the wing. Above the wing's semi-floor is a row of five first-floor apartments which, with the public corridor, comprise the extent of the first floor in the east wing.

Under the west wing the ground and semi-floor extend in as far as the south corridor-wall. The semi-floor forms a mezzanine along the east side of the heating basement with its full 20′ ceiling. The heating basement occupies the entire ground floor as it extends west under this wing. The semi-floor and the space beneath it accommodate rest room for the maintenance staff, elevator shafts, stairs, corridors, etc.

But on each of these five upper floors are five "combined" apartments. In these combined apartments two of the standard type apartments – designated A, B, C, D, E – are combined into luxury apartments, designated AC, AD, or BE, according to the component apartments forming the luxury suite.

In this way the architects' plans for Hycroft Towers provide a flexible arrangement to safeguard the building's revenue potential under possible varying circumstances of the future. The layout permits the 25 combination apartments, or any desired number of them, to be separated into their original components should conditions arise where such a change would be beneficial to the revenue. Of course, the combination apartments could later be set up again with changing conditions.

These changes can be made without disturbing anything but some non-bearing partitions. Not only was the wiring, roughing in, and such things designed to permit this, but also the layout of the suites themselves. The location of the various rooms in each apartment in relation to each other and to adjoining suites is such as not to hinder but to help such modifications – for example, the changing of the second bathroom in a luxury suite back into the kitchen of one of its component apartments. In this way the number of apartments in Hycroft Towers may be varied from its present 155 to a possible total of 180.

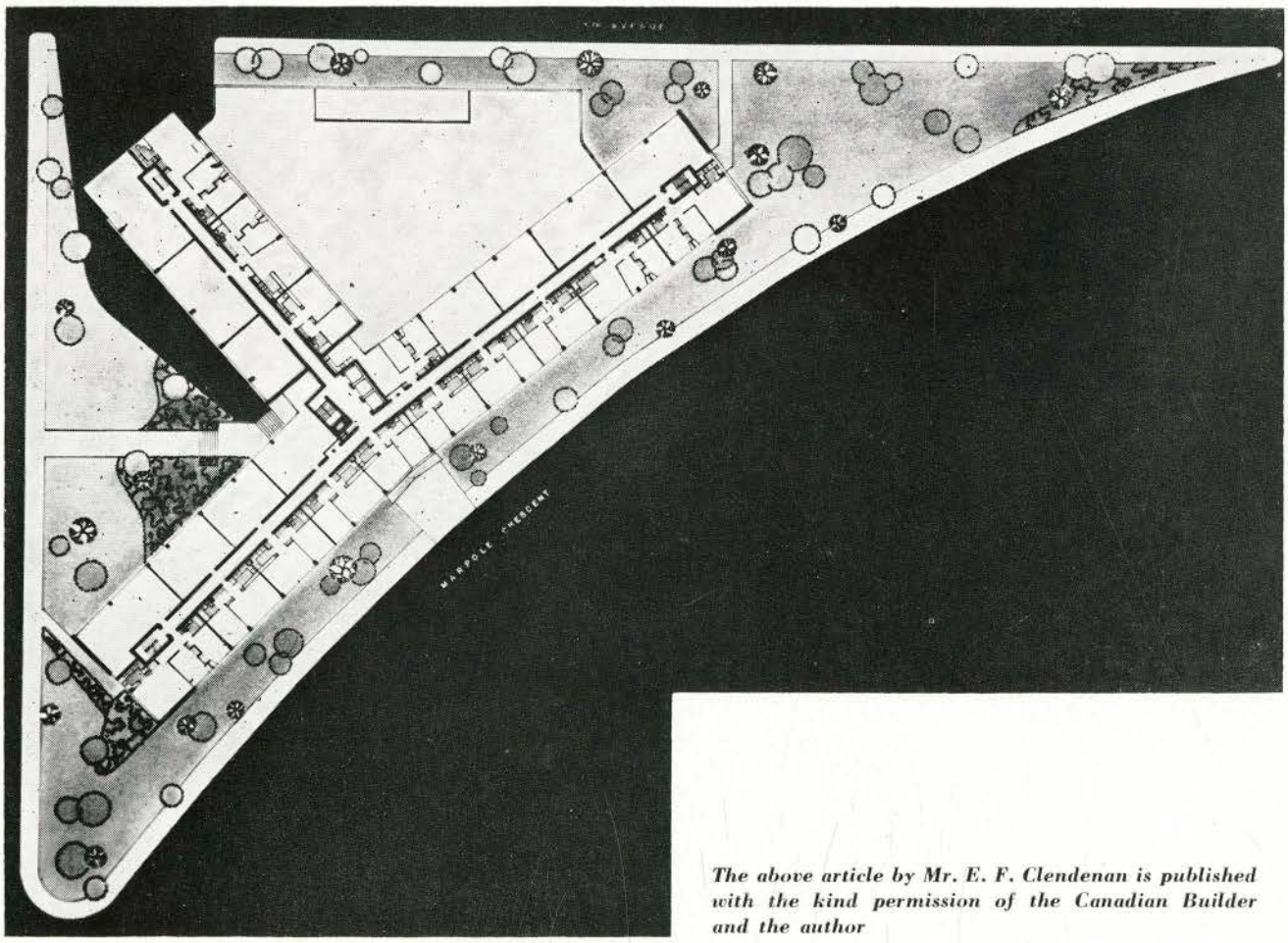
In the building's actual erection one of the principal economies in time and material was effected by the use of only one set of plywood forms for pouring in succession all the upper eight stories of the cage. D. C. Simpson, of Semmens & Simpson, saw this method proved in the building of the Metropolitan Apartments Housing in Los Angeles on his trip to American centers for ideas to incorporate into Hycroft Towers. After using it, both he and Mr Safir endorse the method.

Another economy was achieved by the despatch to England of a 3′ 6″ module of the mullions center to center so that Critalls should ship their standard type all-metal mullions to fit exactly the cage openings – also permitting smooth and easy later introduction of inner partitions vertical to the mullions, if desired. This all-metal fenestration, together with metal door frames, also underlines the absolutely fire-proof construction of the building.

The interior doors are solid-core hardwood-veneer with solid-metal unit locks and trim. Entrance doors for revenue traffic are all full-vision, armor-plate glass and aluminum. All apartment living space is floored with ¾ inch oak; bathrooms, kitchens, and public corridors have rubber tile – laid in mastic on the concrete slab.

All apartment millwork is of hardwood of various sorts. Economy was achieved through its being designed for mass production. Many of the partitions are storage walls. Standard space division within the apartments is by two ½-inch Gyproc panels, plastered on both sides, matched to the dimensions of the cage to obviate framing. Party walls are of similar Gyproc sheets but with rock-wool insulated dead-air space between them to achieve a high degree of sound proofing.

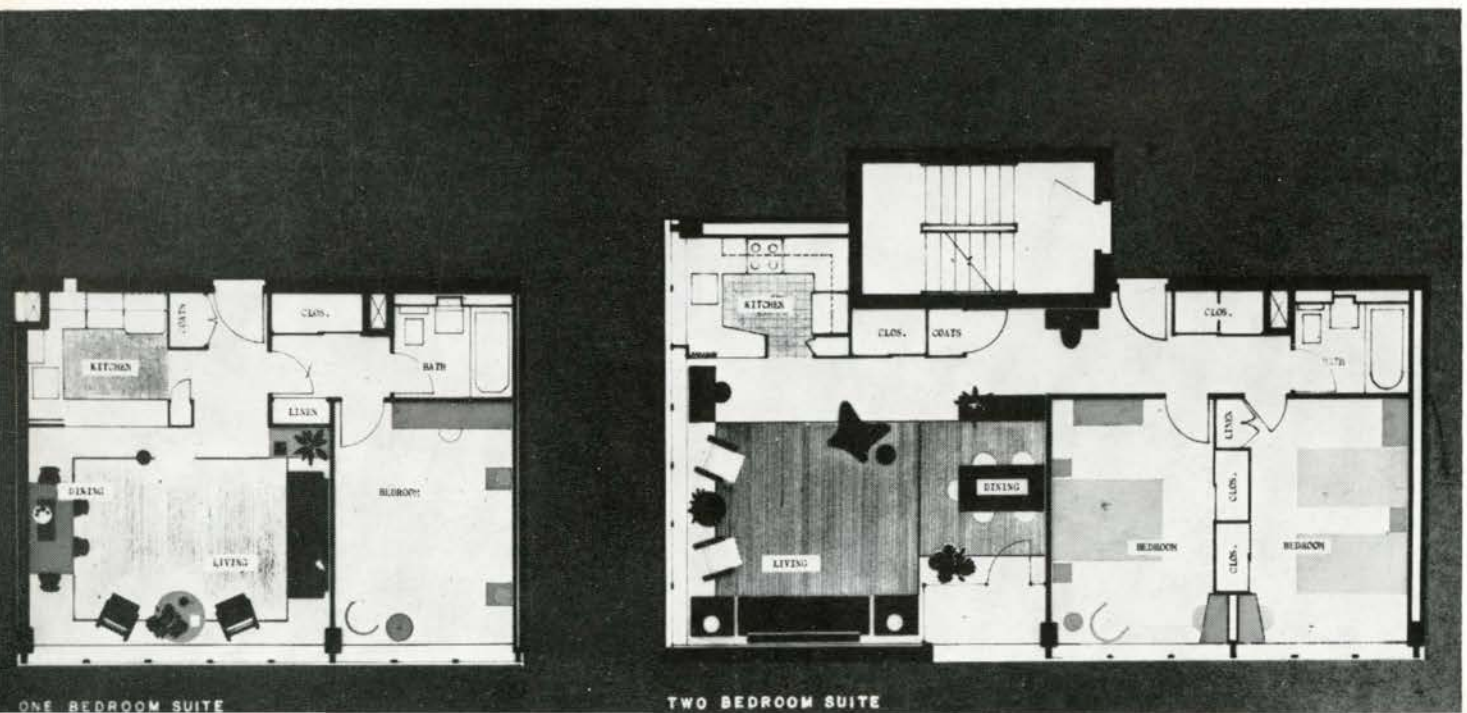
Stale air is exhausted from kitchens and bathrooms through electric fans on the roof. Heating is from semi-recessed convector radiators served by two 1370 H.P. oil-fired boilers with completely automatic controls achieved through a control system employing both inside thermostats and weatherstats.



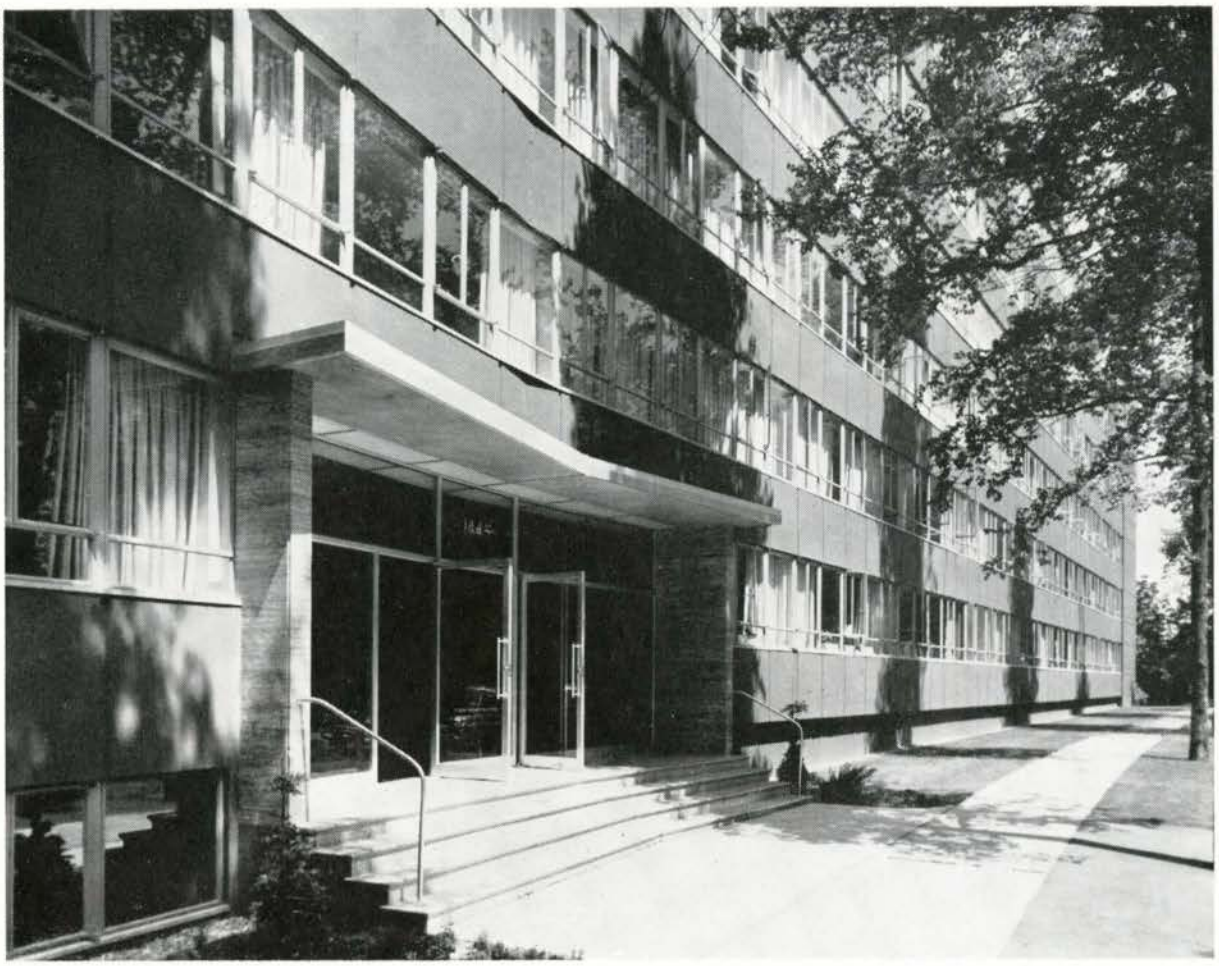
The above article by Mr. E. F. Clendenan is published with the kind permission of the Canadian Builder and the author

West and north elevations looking towards secondary side entrance below recessed link between the three wings

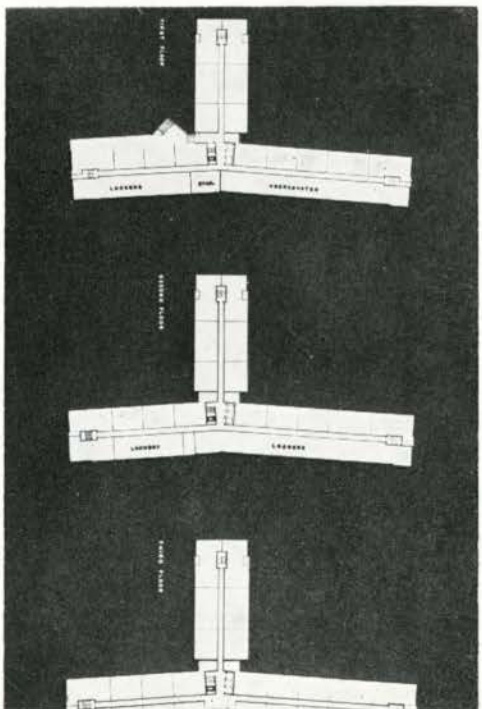
North elevation with garage entrance

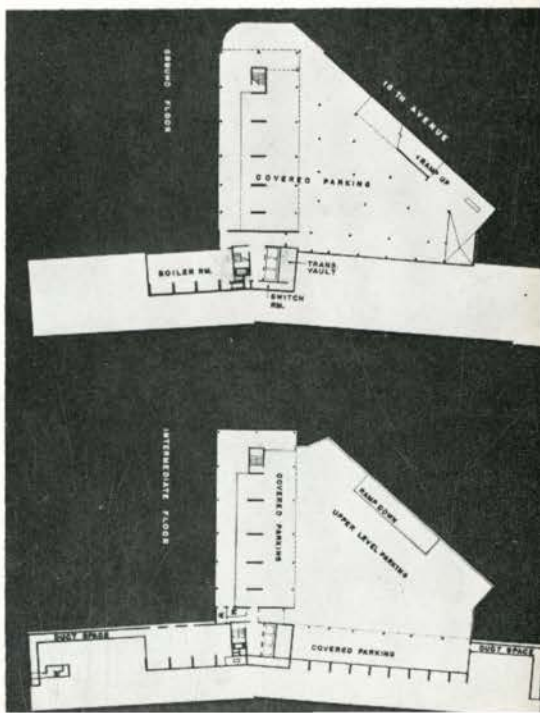


GRAHAM WARRINGTON



Main entrance on south elevation





Helen Simpson Flower Shop, Toronto, Ontario

James A. Murray, Architect

W. R. Kissack, General Contractor

This alteration of an existing store was designed to meet the specialized requirements of a flower shop and to create a pleasant garden like setting for the display and sale of flowers. The original shop was long and with a width of only 21 feet. To offset this the shop has been divided in plan with a forward display space, a selling area and a consultation space. In section the building has been opened up through two floors and the entire front glazed. Irregular shapes used were designed to correct visual problems of the interior.

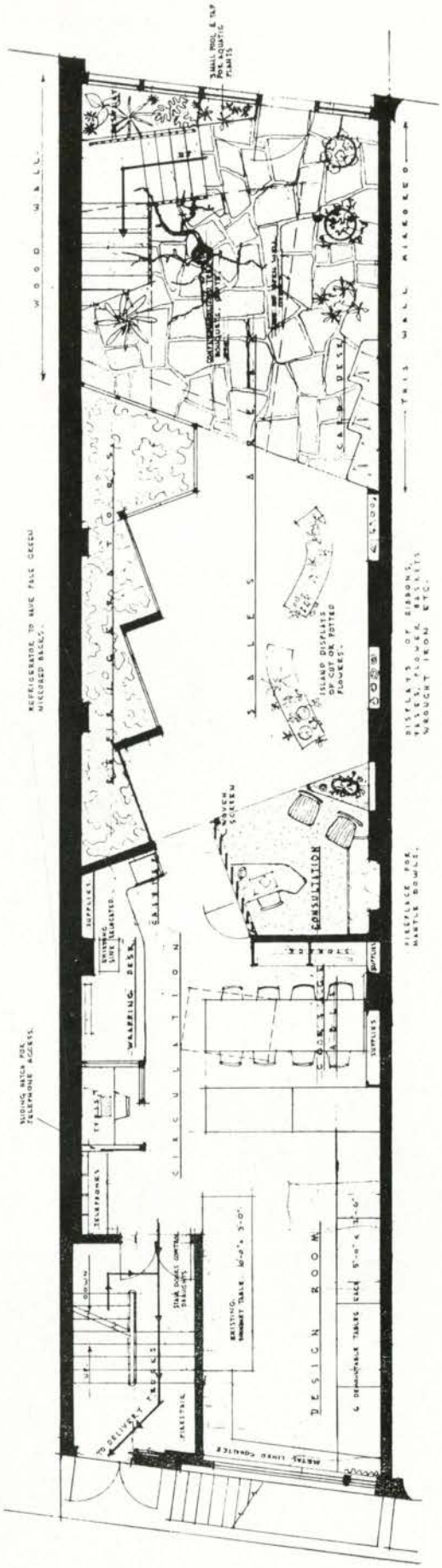
Bouquets and small floral ornaments are clipped to the cherry tree installed in the front of the shop. A stream bubbles down a rock garden in the front window and the open stair to the flower mezzanine rises up beside the stream and around the display tree. The sawtooth display refrigerator removes the heavy access doors from the glass front and makes separate sales areas for viewing flowers.

Open stairwell seen from second floor sales area

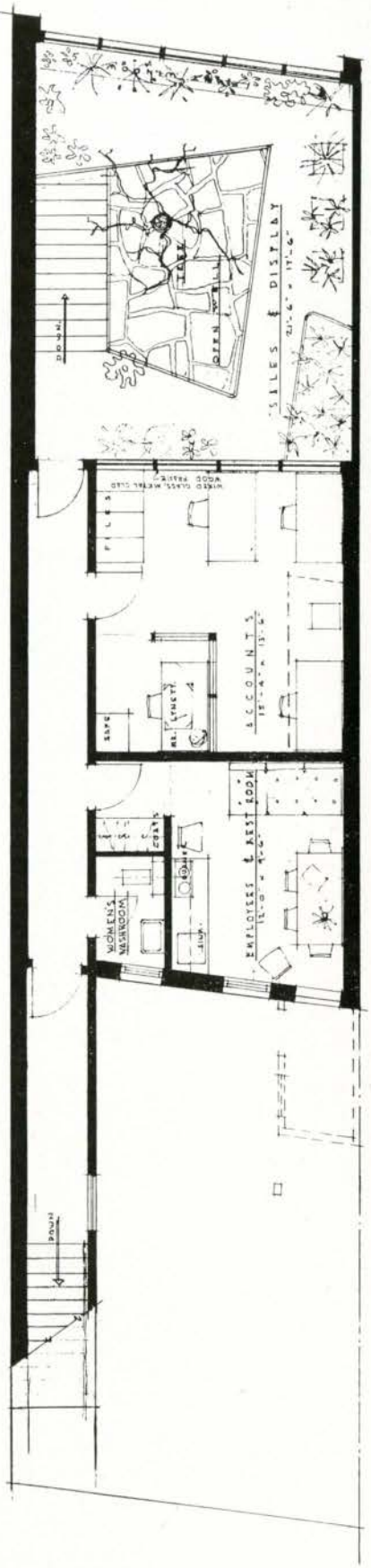
Sawtooth display refrigerator seen from rear of shop

MAX FLEET

Interior view showing refrigerator, open stair to second floor, display tree and glazed front.



Ground floor

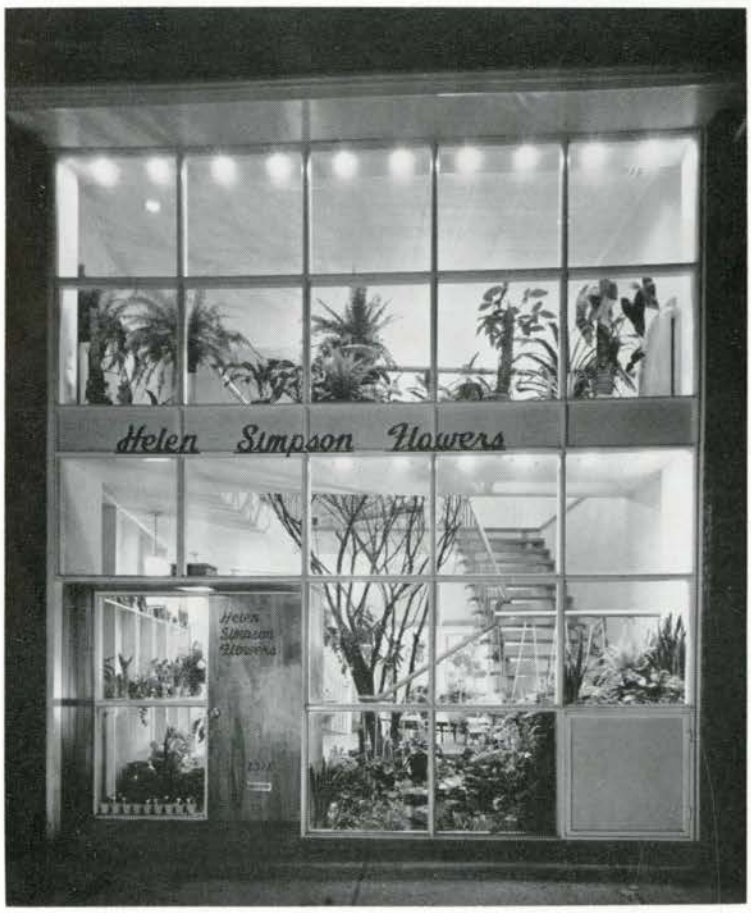


Second floor

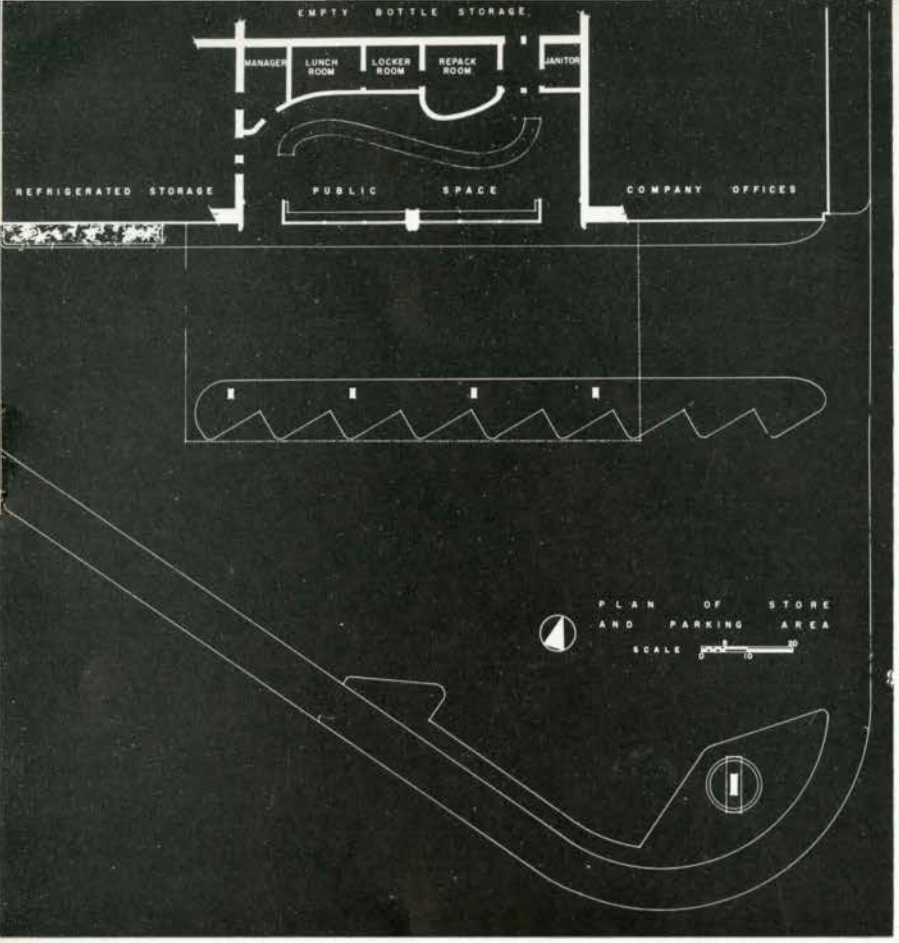
MAX FLEET

Consultation space

Night view into shop from street



The consultation space is a necessity for private conversation with clients on flower arrangements for weddings, funerals and receptions. This area is intimate in scale and with facilities for book display and mantle flowers. Floors are flagstone in the sales area and broadloom in the consultation space.



O'Keefe's Brewing Co. Ltd., Toronto, Ontario

Earle C. Morgan, Architect

Evan S. Martin Construction Ltd., General Contractor

Retail Store

Dundas at Victoria Street

South elevation of store

PANDA

Interior of store

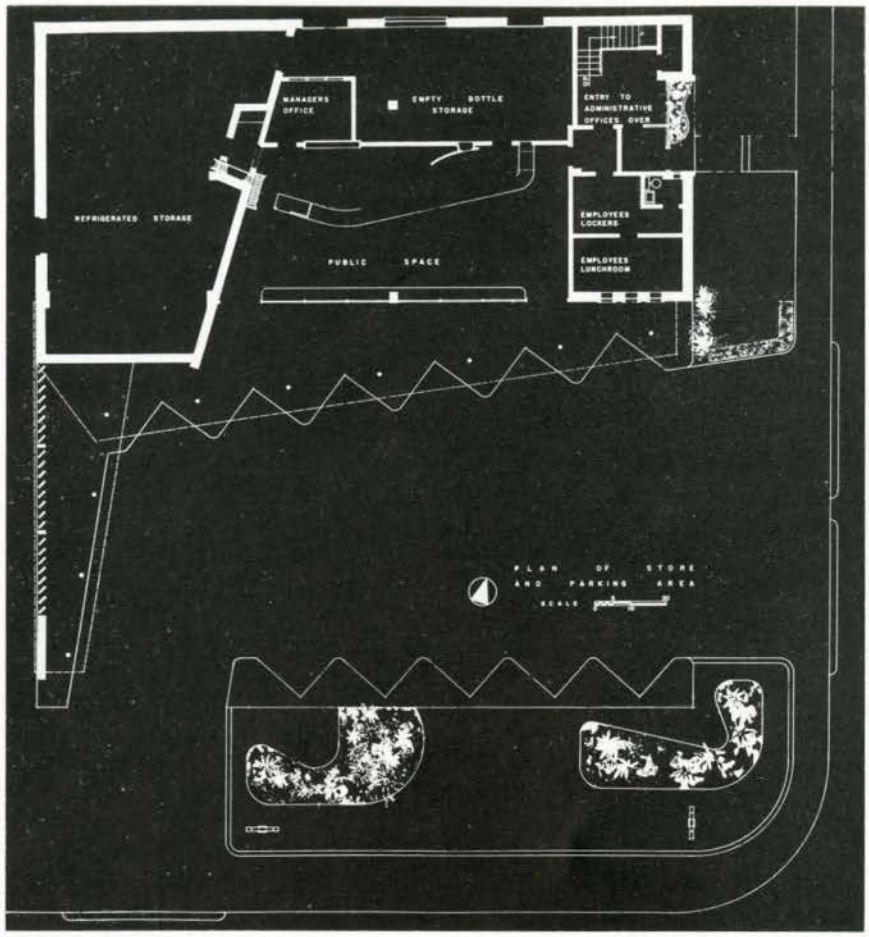
Advertising pylon and store

O'Keefe's Brewing Co. Ltd., Toronto, Ontario

Earle C. Morgan, Architect

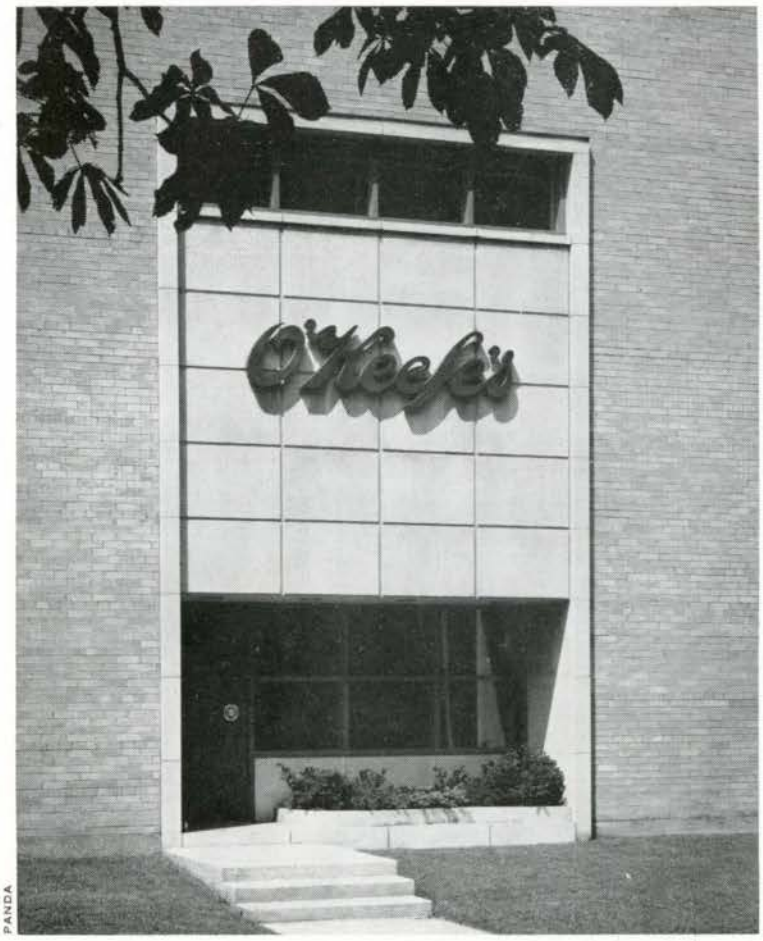
Evan S. Martin Construction Ltd., General Contractor

Front elevation, store and administration offices



Retail store and administration offices

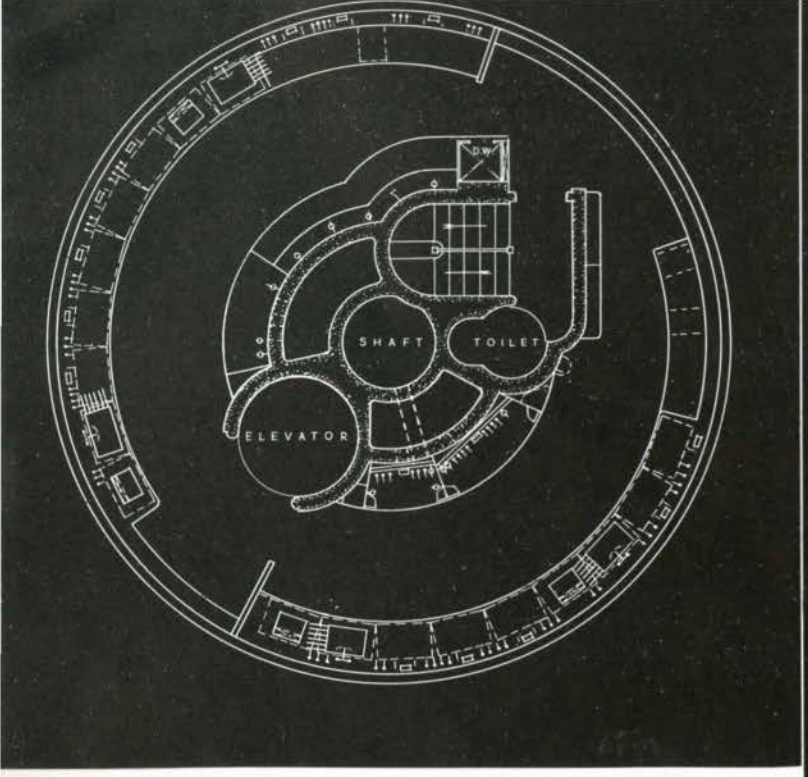
Dundas at Simcoe Street



PANDA

Entrance to administration offices

Interior of store



Square floors alternate with smaller, round mezzanine floors

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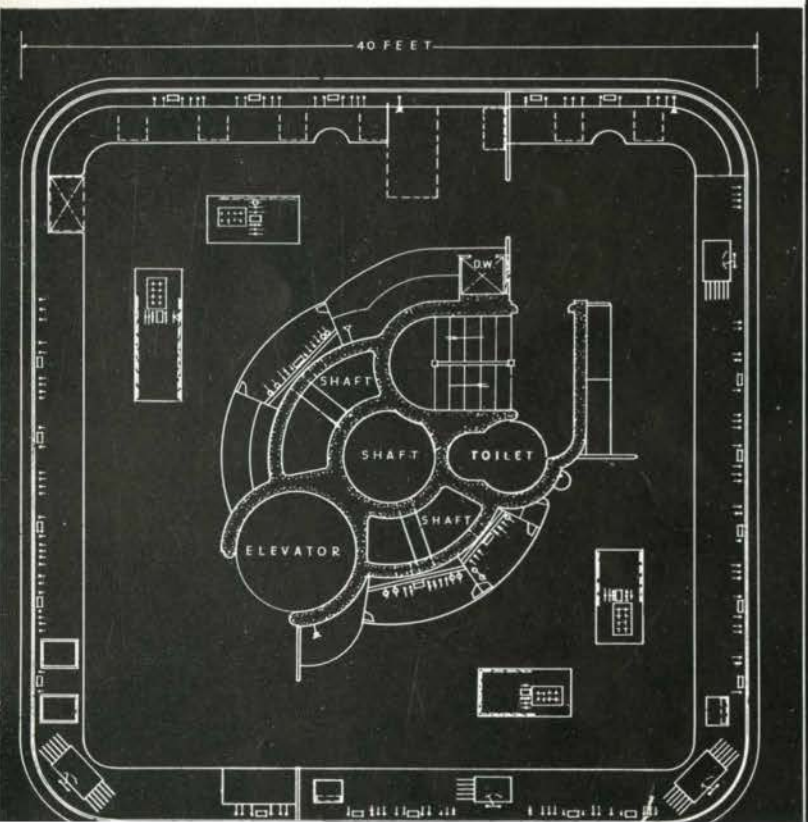
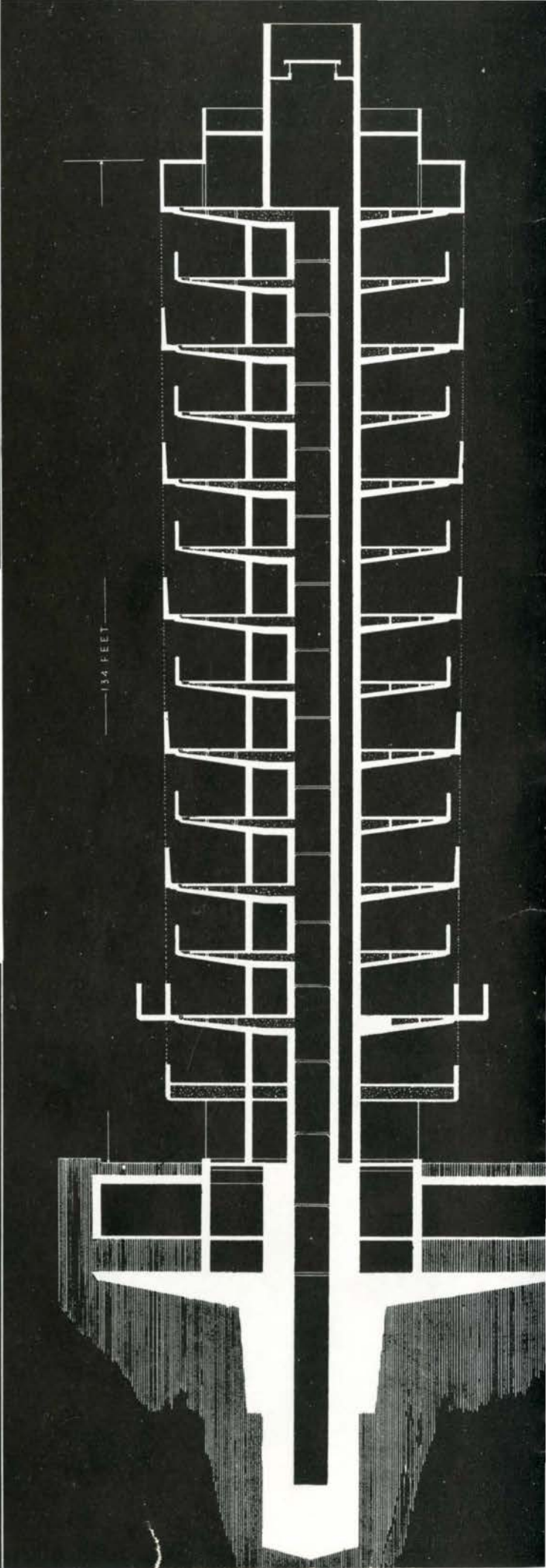




Helio-Laboratory for
Johnson Wax Co., Racine, Wisconsin

Frank Lloyd Wright, Architect

Entrance foyer seen from open gallery

1

2

3

4

1. View of laboratory

2. Advertising reception room in new office building connecting research tower with administration building designed by Mr Wright in 1936. The diameter of the glass dome is 25 feet

3. View of dining area, doors to right lead on to roof garden

4. View of general office from mezzanine (1936)

All photographs are published through the courtesy of S. C. Johnson & Son, Inc.

United Nations Assembly

Lewis Mumford

THE GROUP OF BUILDINGS that forms the United Nations headquarters reaches its architectural anticlimax in the recently completed General Assembly Building, a fairly low, sort of oblong structure with incurving side walls and a roof that droops in a long, graceful curve between the two ends. This building is the home of what must in time be the most important deliberative body in the world. But there is nothing in its shape, its position, its external treatment, or its relation to the two other United Nations buildings – the Conference Building and the Secretariat – to indicate its importance or that of the organization it serves. The architects who created it would have a hard time defending its exterior even if they had been designing a modern motion-picture palace, which is the only thing it resembles. It is the moving-picture palace of 1950, as the Music Hall was the moving-picture palace of 1930. Instead of a big mural by the conventional Ezra Winter, there are big murals by Fernand Léger, decorative yet equally empty and – is this a heresy? – equally conventional. But as a home for a great institution that seeks to establish peace and co-operation between the nations of the world, it is a painful simulacrum, the kind of thing Hollywood might have faked.

The main axis of the Assembly Building, like the main axes of the two other buildings, runs north and south. Its southern façade gives on the great entrance court that faces on First Avenue, to the west. To the southeast of the building, and joined to it by a three-story passageway, is the low and oblong Conference Building, and farther to the south is the narrow but towering Secretariat. Unlike either of these structures, the Assembly Building has the look of a blank wall from almost every aspect. The only real break in its monotonous expanse of flat stone is the vast window that takes up the whole of the southern end. The side walls were to have been marble, to match the blank north and south ends of the Secretariat, but marble proved much too expensive, and so these walls are only a border of marble surrounding a rather pink English Portland stone, which is not sufficiently close to the marble in either color or texture to blend with it and not sufficiently different to provide an interesting contrast, though time and dirt and the absorptive qualities of this stone may remedy this. Making no attempt to modify these expanses of stone by the application of any detail– sculpture or even inscription – the architects were content to quite literally draw a blank; even the letters "U.N.," which could have been as proudly displayed as the old Roman "S.P.Q.R." or the French "R.F.," are absent. The delegates' entrance, a long, two-level ramp, and a series of exit doorways provide the only accents. (Should one add the minuscule sculptured panels in the doors of the public entrance?) Moreover, there is no approach to the building, for either the delegates or the public, except a sidelong, glancing one. The advantage of a frontal approach, enabling one to see the architectural features, was forfeited by the designers, perhaps for the good reason that they had provided nothing to see. The delegates' entrance, near the southwest corner, is marked only by a panel of marble above the marble-sheathed marquee. The public entrance, at the north end, and as far away as possible from the major subway stops, is equally banal; were it not for an improvised street sign and a modest marquee, one would have no clue to its whereabouts.

These lapses emphasize the consistently undistinguished nature of the structure, whose outer shell gives no clue to either the form of the interior or the activities that take place there. The north end of the building is composed of alternating vertical panels of marble and photographically marbled glass–the pattern of the façade of the Daily News Building, but without its texture or color. This change of emphasis from the horizontal lines of the façades of the other United Nations buildings might have been æsthetically justified if it had been less halfhearted. But the gray featurelessness of these alternating bands of glass and marble is as lacking in character as the bleak side walls; its only effect is to give greater distinction and delight to the treatment of the façade of the Secretariat, as if the architects had looked at the Assembly Building through a reducing glass, for they have eliminated whatever force and dignity even a form as inept as this might have acquired through the use of good detail.

Only one façade of this building, indeed, has any positive architectural quality – the great window, with gigantic square panes, running across the southern end and boxed in by a projecting marble frame. This window dominates, with a certain æsthetic assurance, what one excusably mistakes for the main entrance to both the Conference and the Assembly Buildings. But it wastes its monumentality upon the desert air, for it is not an entrance at all. A small stairway and platform, issuing dramatically from one side of the window, reveal its true purpose; it is a fire exit, and only that. The one part of this monumental structure that

visually says "Come In!" is therefore actually saying "Stay Out!" Since this false entrance is of no use for getting in, what purpose does it serve those within the building? This question is not easily answered, for though the view through the great transparent panel is almost unobstructed, the delegates on the ground floor, and the public and the press on the floor above, look out on the sordid industrial wasteland to the south of the United Nations site. Thus a bad site plan, which reveals what it should have taken pains to conceal, is capped by a bad building plan, which compounds this error with interest, in the manner of dwellers on cramped suburban lots whose picture windows face their neighbors' garages and clotheslines.

The three other sides of this building are innocent of any æsthetic decision, and there is little to say of its general form and silhouette except that they tell nothing about the interior. At one stage of the planning, there was a reason for this kind of structural envelope; it was to take care of two separate auditoriums. That accounts for the bulge at each end and for the rise in the roof line. When the decision to build but one auditorium – and ovoid, at that – was reached, the architects had become so committed to this structural envelope that they retained it unaltered, which is all the odder because the auditorium is at the center, the narrowest point of the building. The only outside indication that this auditorium exists is a blister like dome of lead-covered copper, too small to be of any positive visual consequence, though it manages to spoil, from certain angles, the one merit the roof could have had, as a sweeping, unbroken curve. Neither functional use nor æsthetic purity can account for this design. Happily, viewed at one point – from the north, along First Avenue – the two visible buildings (the Conference Building is conspicuously absent) suddenly become a vision of delight, when the steep down curve of the Assembly roof, looking somewhat foreshortened from below, intersects the steep marble slab of the Secretariat, to the south. If one could stand permanently at that point, one could forgive all the architectural lapses. Genuine four-dimensional architecture would present a succession of such miracles as one moved around from this point and into the buildings, but the United Nations design, unfortunately, offers only one clean architectural hit. Still, that fine view is worth seeking out, especially on a sunny day with a blue sky, for the pleasures of an abstract composition that is also oddly satisfactory as a symbol of the United Nations itself.

After taking the measure of the exterior of the Assembly Building, one turns to the inside, in the hope of finding some compensatory excellence, but apart from the great lobby and the handsome lounges on the south side, on all of which I touched in a recent discussion of the Conference Building, it is almost a museum of modern curiosities. The main public entrance hall has a noble scale, but the details are, so to speak, consistently jumbled, from the marbled glass, whose only intrinsic value is to hide the dirt that accumulates on unwashed windowpanes, to the parabolic arches that support the ramp leading to the first of a series of projecting balconies, a device that reminds one of nothing so much as a Meyerhold stage setting of the twenties. As for the balconies, whose billowing forms, finished in white plaster, define the upper levels, they recall the imaginative black-and-white drawings of "plastic" concrete structures that Eric Mendelsohn published some thirty years ago. This treatment is not necessarily bad in itself, but it is surely in æsthetic contradiction to the rest of the structure, and it doesn't belong next to the vertical entrance, with its mulberry-and-blue columns, or the stark, unfinished look of the blue ceiling. This whole entrance hall might well have been left unfinished until the architects could decide upon the perfect treatment for this new type of building. Some coherent effort should have been made to establish in the minds of both spectators and delegates that the nations of the earth have come together here, in all their variety, their individuality, their richness of historic background, to create a new reciprocity and unity. As it is, the only recognition of this fact is the souvenir shop, with its trinkets and minor works of art from many of the member nations. It is quite plausibly a good political instinct, as well as a taste for novelty, that draws so many visitors to that modestly symbolic meeting of cultures. Perhaps what this entrance needs most is a dramatically conceived exhibition space, the sort of thing one finds in a museum of human geography and ethnography, where the pageant of man could unroll before the eyes. If the hall were not so narrow and so spectacularly broken up by the ramp leading from the main floor to the first of the balconies, and if the spacious side corridors were not (in glaring contrast to the hall) so low, someone might still be able to find a way of conveying the meaning and the challenge of this great structure. But the space has been too badly chopped up. One's attention is directed to the spatial forms, not to the purposes of the building. For this reason, the architecture does almost nothing to reinforce the sense of human fellowship and understanding that the visitors bring into the building.

At the core of the building is the General Assembly Hall, which is topped by an open-ribbed dome painted powder blue, with encircling lights pointing down on the delegates. The south half of this hall, which gives on the delegates' lounge, is a semicircular wall, slanting inward toward the dome, ribbed by wood fluting covered with gold leaf, and unbroken except for the speakers' rostrum and the two continuous side panels of windows for the radio and television booths. The other half is open to the press and the spectators, who are accommodated in a tier of seats rising from the floor and in a balcony above it. Thus this hall is a combination of parliamentary chamber and theatre auditorium. A speaker on the rostrum faces both delegates and spectators. Above him is the desk of the presiding officers, and above them is a large bronze shield bearing the United Nations emblem in white, surrounded by large plastic medallions, covered with gold leaf, that will eventually bear the insignia of the component nations. But when one considers that the United Nations has only sixty member countries, the proportions of the hall seem overwhelming. That is not the fault of the architects; rather, as the late Matthew Nowicki, one of the special consultants of the board of design, once observed, it reveals the weakness of the Charter of the United Nations, which, under the formula of "sovereign equality," provides the smallest state with as many seats as the biggest powers. As a result, the Assembly, even while in session, often seems empty, thus defying the conditions Mr Winston Churchill holds

essential to good parliamentary debate. It seems not to have occurred to anyone that this constitution is amendable, and that the composition of the organization could change, in which case even less seating space might be required. Here, as throughout the entire scheme for the United Nations buildings, what is saliently lacking in both the thinking and the architecture is the quality that differentiates modern design from the immobile and ponderous monumentality of the past—the ability to anticipate change and to provide for it. In the Assembly Building, as in the Conference Building, the future is frozen solidly in the form of the present. This lack of flexibility is a serious failure in planning for an institution that may undergo many constitutional changes before it solidifies into a durable mold.

"We were not trying to make a monument," Wallace Harrison, the architect in charge of the project, has repeatedly asserted. Whether the architects were trying to or not, they produced a building that has the weaknesses of a monument – its rigidity of plan, its sacrifice of function to formal expression. The imposing proportions of the Assembly Hall might have been justified if the architects had given external expression to the building through the bold use of a cylindrical or hemispherical form that would have captured the eye and perhaps even captivated it. The monumental weakness of this building – or the weakness of its monumentality –probably stems from the architects' ambivalent attitude toward the purpose of architecture. In the name of functionalism, they have perpetrated formalism, and under the illusion that they were designing a useful workshop, they have failed to meet the United Nations' greatest practical need – the kind of plan that could be adapted to new uses. Despite this sacrifice, all three United Nations buildings fail to meet the condition that would justify the subordination of practical need to æsthetic form – the creation of an endearing symbol of the purposes and meaning of the United Nations: order out of chaos, unity out of diversity, peace and harmony out of anarchic belligerence.

These three buildings do not in any way suggest in architectural idiom the dawning concept of world government or make visible the love and co-operation that are needed for its success. The arid neutralism of this architecture reflects neither paternal power nor maternal love; without any warmth of feeling, without any impressive image of human vitality, these buildings have only one climax: the thirty-nine-story skyscraper Secretariat, a type of building that to distant peoples is a stock emblem of the things they fear and hate – our slick mechanization, our awful power, our patronizing attitude toward lesser breeds who have not acquired the American way of life. But this is the veritable new mother of parliaments, and its mission is to protect life and nourish life in every part of the planet, guarding every human being against the perverse forces that now threaten him. No one should be able to look at these buildings from afar, or to penetrate their interior, without having his imagination awakened, his conscience touched, his will to peace quickened or reinforced, by the design. If the United Nations matures into an organ of effective world government, capable of affectionately commanding men's loyalties throughout the planet, it will be in spite of, not because of, the architecture of its first headquarters.

This is the first of a series of articles on finishing hardware which will appear in this Journal from time to time.

Notes on finishing hardware

Harry Brown

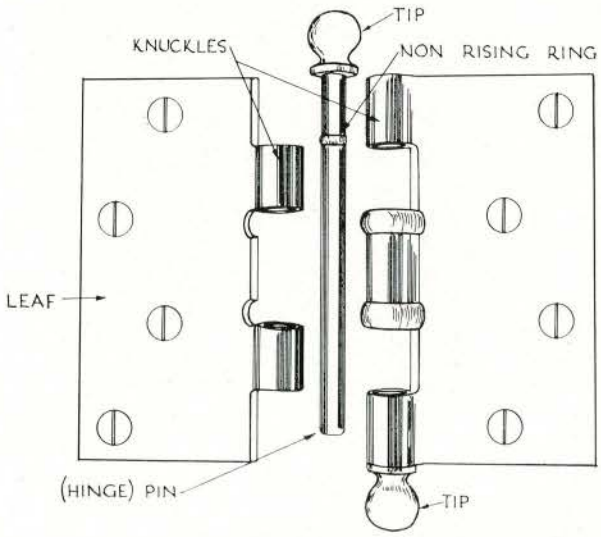
STANDARD DOOR BUTTS

This article deals with door butts for ordinary full-sized doors. Subsequent articles will deal with special butts. The components of a butt are shown in Fig. 1. Basically speaking all butts for standard full-sized doors contain the components shown.

Leaves

Butts may be formed in four basic ways. Full mortise, half mortise, full surface, and half surface, all of which are needed for application to different door and jamb conditions.

Leaves vary in their vertical dimension which is known as the length, their horizontal dimension known as the width and their thickness as the weight. These items are discussed later. The leaves have countersunk screw holes which take either wood screws or machine screws. In general, machine screws are used in metal doors or metal frames, and wood screws are used in wood doors or wood frames. A combination of the two is often necessary. When machine screws have to be used the location of the holes should be very accurately drilled from a template. These butts are known as templated butts and the others are known as non-templated butts. Fig. 1 shows non-templated butts; Fig. 2 shows templated butts.



NON - TEMPLATED BUTT

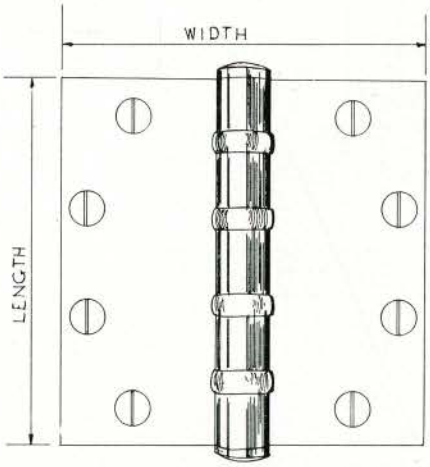
Fig. 1

Pins

Pins in butts can be removable or fixed. They can be made of the same material as the butts or a harder material than the butts. Most butt hinges for full-sized doors are equipped with loose pins, which allow the doors to be installed quite easily, by fixing the separated leaves individually to the jamb and to the door, and then joining them with the pin. Due to the constant twisting and inevitable binding of pins within the inside walls of the knuckles, many butts are equipped with non-rising loose pins. This non-rising feature is shown in Fig. 1 as a split ring around the pin which holds the pin in place while the door is in operation. Non-removable pins are often known as fast pins or tight pins and are permanently fixed by the manufacturer so that they cannot be removed, either by welding or peaning over.

Tips

Butts are equipped with one of three types of tips, either button, ball, or hospital type. Readers are probably familiar with each of these but it is interesting to note that all butts prime coated for painting have button tips because of the ease of painting.



TEMPLATED BUTT

Fig. 2

Bearings

To reduce friction and wear, bearings, bushings or washers are often introduced between the knuckles. They

can be ball bearings, fully jewelled bearings, oilite bearings, sleeve bushings, or flanged bushings.

How to select butts

Butts can have the following characteristics, each of which has to be carefully considered and specified.

1. Length.
2. Width.
3. Weight and Bearings.
4. Number per door.
5. Material and finish.
6. Type of butt to suit door and jamb.
7. Types of corners.
8. Types of screws.

Left –
Barrel of invisible ball-bearing hinge.

Right –
Barrel of visible ball-bearing hinge.

Fig. 3

1. Length

The length of the barrel or joint excludes the tips, and is determined as follows:

Door Thickness	*Door Width*	*Butt Length*	*Remarks*
¾″ and 1⅛″ (wood)	Up to 24″	2½″	Cabinets
⅞″ and 1⅛″ (wood)	Up to 36″	3″	Storms
1⅜″ (wood)	Up to 32″ 32″ to 37″	3½″ 4″	
1¾″ (steel or wood)	Up to 32″ 32″ to 37″ 37″ to 43″ 43″ to 50″	4½″ 5″ 5″ 6″	Extra Heavy
2″, 2¼″, 2½″ (steel or wood)	Up to 43″ 43″ to 50″	5″ 6″	

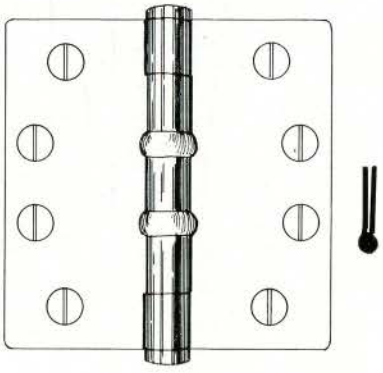


Fig. 4

2. Width

Butts are measured across both leaves when fully open, see Fig. 2. To determine the width, apply the following formulae:

a) Doors up to 2¼″ thick

Butt width = twice door thickness + trim projection − ½″

Butt is set back from edge of door ¼″.

b) Doors 2½″ to 3″ thick

Butt width = twice door thickness + trim projection − ¾″

Butt is set back from edge of door ⅜″.

3. Weight and Bearings

The weight depends upon the weight of the door and the frequency of its operation.

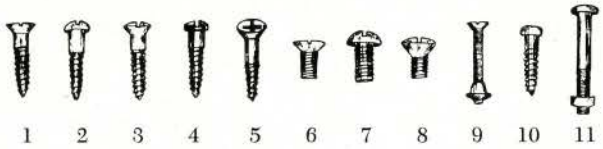
Extra heavy ball bearing butts should be used on heavy doors and doors where high frequency operation is expected.

Ball bearing butts should be used on average weight doors and doors where normal frequency operation is expected, on hollow metal and Kalamein doors, and all doors equipped with door closers.

Plain bearing butts should be used on light doors, and doors where infrequent operation is expected.

Bearings are usually visible, but concealed ball bearing butts are made with a large diameter barrel with the bearings in the knuckles, see Fig. 3.

Type of Door	*Estimated Yearly Frequency of Use*	
	High	*Low*
Large department store entrance	1,500,000	
Large office building entrance	1,200,000	
Theatre entrance	450,000	
School entrance	225,000	
School toilet door	225,000	
Store or bank entrance	150,000	
Office building toilet door	118,000	
Office building corridor door		22,000
Store toilet door		18,000
School corridor door		15,000
Dwelling house entrance		15,000
Dwelling house toilet door		9,000
Dwelling house corridor door		3,600
Dwelling house closet door		2,200



1 2 3 4 5 6 7 8 9 10 11

1. Flat head wood screw
2. Round head wood screw
3. Oval head wood screw
4. Pyramid head wood screw
5. Phillips head wood screw
6. Flat head machine screw
7. Round head machine screw
8. Oval head machine screw
9. Oval head machine screw with grommet nut
10. Lag screw
11. Carriage bolt

Fig. 5

4. Number of butts per door

Doors up to 60″ high require one pair of butts.

Doors 60″ to 90″ high require a pair and a half of butts.

Doors 90″ to 120″ high require two pairs of butts.

5. Materials and finish

Generally butts are now wrought in one of the following metals – steel, brass, bronze, white bronze, stainless steel, aluminum. Butts can be supplied with the following finishes.

Material	*Interior Use*	*Exterior Use*	*Remarks*
Steel	Highly polished, heavily copper plated then final plating		Finely finished
	Polished and plated		
	Planished and plated		Cold rolled finish
	Bonderised and primed		
Brass or Bronze	Bright bronze Dull bronze and oxidised Statuary bronze Bright brass Dull brass Dull brass and oxidised Nickel plated Chromium plated		Stainless steel pins
White bronze	Bright Dull		Stainless steel pins
Stainless Steel	Bright Satin		
Aluminum	Bright Satin anodised		Stainless steel pins

6. Corners

The corners of the leaves are normally square, but rounded corners are available, see Fig. 4. This assists the installation of butts with a mechanical Butt Morticing Router.

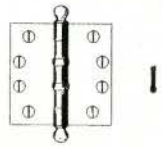
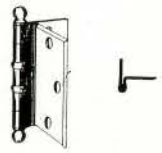
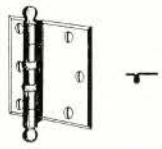
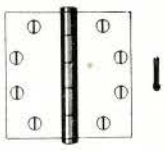
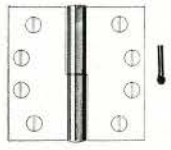
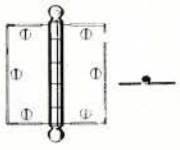
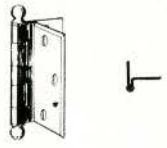
7. Types of Screws

Depending upon the type of door and jamb, many different types of screws have to be used. A selection of standard screws for butts are shown in Fig. 5.

8. Type of butt to suit door or jamb

The following types are made in brass, bronze or steel. In addition all ball bearing butts are made in stainless steel and aluminum.

All ball bearing butts are made in extra heavy duty types, hospital types, extra heavy duty hospital types, and hospital friction hinge extra heavy types.

Butt	*Type*	*Door*	*Jamb*	*Frequency*
	Extra heavy ball bearing full mortice	Heavy Wood or Metal	Wood or Metal	High
	Ball bearing full mortice	Medium weight Wood or Metal	Wood or Metal	Average
	Ball bearing half surface	Medium weight Kalamein	Kalamein or Steel	Average
	Ball bearing half mortice	Medium weight hollow metal	Channel Iron	Average
	Ball bearing full surface	Medium weight Kalamein	Channel Iron	Average
	Full mortice	Medium weight Wood	Wood	Low
	Full mortice loose joint	Medium weight Wood	Wood or Metal	Low
	Full surface	Light weight Wood	Wood	Low
	Half surface	Light weight Wood	Wood	Low

The next article appearing under *Notes on Finishing Hardware* will be entitled *The Installation of Standard Door Butts.*

NEWS FROM THE INSTITUTE

ANNOUNCEMENT

Members will be pleased to know that the President of the Royal Architectural Institute of Canada has been invited to attend the Coronation, and that he has been assigned a seat in the Abbey. It is gratifying to know that Mr Morris has accepted, and will represent the Institute on that distinguished occasion.

FUND FOR THE RESTORATION OF WESTMINSTER ABBEY

At the 28th February Executive Committee Meeting attention was drawn to Mr Churchill's appeal. It was decided that the Institute should draw the attention of all Provincial Associations to this appeal and that, in order that the response would be considered representative of the architectural profession in Canada, donations collected by the Provincial Associations should be sent to the Institute with the names of the donors, for the Institute to forward them to Mr Churchill's Fund.

Cheques from the members of your Associations should be made payable to your Association and marked "Mr Churchill's Fund". Your cheque representing the total contribution of your Association should be made payable to the RAIC and marked "Mr Churchill's Fund."

Your co-operation in this worthy appeal for £1 per person from one million people will be appreciated. We would like to place the date for receipt of the contributions from the Provincial Associations by the RAIC as June 15, 1953.

C. J. G. Carroll

ALBERTA

I have on many occasions acted as one member of a board for examining candidates for registration as architects. The special subject most frequently assigned to me has been "Historical Architecture and Ornament". Only sincere lovers of architecture can imagine what I have suffered. Few candidates can dislike examinations more heartily than some examiners do. One is haunted by an overhanging suspicion of the futility of examinations written or drafted with an eye on the clock. I venture to make some remarks on the subject in the hope that I may induce some others to give thought to the matter. My observations have less application to examinations conducted in schools of architecture because these are part of a prolonged process of training, and usually consist of a series of term tests leading up to finals and, in addition, are weighted by marks given for class work on which students employ a fairly extended time.

A "sudden death" type of examination is a very different sort of thing. In this, a candidate, accustomed to give answers and to provide solutions with scrupulous deliberation and a sense of responsibility for the consequences, may exhaust too much time on one or two questions and then hurry on to make quite inadequate replies to the remainder. He is likely also, from a sort of stage fright in his unaccustomed environment, to fail to do himself justice on any question. Examiners may attempt to make allowances for these difficulties but this is a very unsatisfactory procedure. I am concerned chiefly, therefore, with candidates whose training has been as assistants or pupils in offices. Some may say that there is little need to concern ourselves about these people because the great majority are now trained in architectural schools which provide a more systematic and comprehensive curriculum than can be provided in an office. But whilst unregistered persons are barred from practising independently as architects, it is plain essential justice that ability, however acquired, shall have an opportunity to pass that artificial barrier.

My suggestion then is that, as far as possible, examination should be on the basis of ability shown by work done under conditions of deliberation as distinguished from conditions of haste and excitement. This may be applied in two ways. The first is to divide the various subjects into two or more sections or series to be taken at fair intervals of time. The second is to place more weight on what may be termed "testimonies of study" – that is to say, work done outside the limited period of the examination sitting.

In the system of examination by "series" it would be right that certain of the subjects set should be of final standard and not to be repeated as an advanced stage in a further examination. Otherwise there would be no relief of the pressure on the candidate. In regard to "testimonies of study" there is no question that in such a subject as historical architecture this is a better criterion than a three hour sitting can be. It would also be much preferable in relation to the subject of "Design" which is probably the greatest bugbear of the lot. I suggest that candidates should produce a design of a specified subject which they had been allowed six months to develop and that it should consist of a complete set of smaller and larger scale working drawings accompanied by the relative specifications and contract documents filled in with general conditions, cost, etc. For this last the association's forms may be used.

This somewhat resembles the medieval craftsmen's guild idea of the "prentice work" for admission to the guild. It would be well that it should be required not only from the office trained class of candidates but also from graduates from schools of architecture.

The objection generally raised to proposals of the above nature is that there is insufficient guarantee that work done outside the examination room is the candidate's own unassisted work. It seems to me perfectly fair and right that a candidate should have assistance in this work. Evidence of good training is the principal requirement. But the candidate should take oath that all drawings presented are the work of his own hands, being warned that otherwise he perjures himself.

Cecil S. Burgess

ONTARIO

". . . I want the building to have a modernistic front. That's why I've come to an artchiteck." The client, glowing, failed to notice how the boys in the office froze where they stood. He was quickly ushered into the sanctum sanctorum for safety. Hornyansky, the artist, once said to me – "A real artist should be at least ten years ahead of the layman." He could have said further – "The architect who treats building as one of the living arts should be likewise or else he will be engaged in representative art." Last May, in Los Angeles, the writer blinked at a beautiful Gothic church replete with steeple. A closer look revealed it to be of earthquake-resistant solid concrete. Representative art! On each side ranged new buildings of a delicacy of design and colour never seen before our time, a symbol of an advanced stage of civilization; creative design at its finest. One Toronto architect, known for his modern designs, described the work in Los Angeles as "fabulous". He was not referring to churches but business structures. We all know that most churches built nowadays are disguised by public demand to look like antiques.

In Toronto the Presbyterian Church has already launched a campaign to improve the design of church structures. Their Committee on Church Architecture " . . . felt that something more must be done to promote a fuller appreciation of church architecture. The Committee is sympathetic to contemporary thought in architectural design and deplores the perpetuation of outmoded styles which even today is characteristic of many new church buildings". As a preliminary step they sponsored a competition in the School of Architecture, U. of T. Models of the best designs are being displayed at different points and have already startled the Press and attracted public attention. Some of the solutions are remarkable. They look and feel like churches yet are unlike any seen before in the province. They are considered a serious approach to the solution of the present day problem. The subject of this letter grew out of a lively discussion that took place at a meeting where these models and drawings were shown. It was between conservative and progressive architects, church officials and laymen. One architect was heard to say " . . . church architecture has a magnificent past. We like to think it has an equally great future".

Another thing happening in this city is that the University rather than the practitioners as a whole seems, at least, to be making a concentrated effort to promote public interest in the latest development in design. The School of Architecture is showing the people, for one thing, that good contemporary design requires scholarship, requires the architect. They have recently put on their annual display of models and drawings at a busy department store. This was noticed by the press. A similar display of theirs was televised recently. The public could see not only startling new shapes for some buildings but quiet simple designs with an almost rustic texture of other typical Canadian needs, and withal, a professional touch. All were projects any architect might have in his office – skyscraper, golf club, community centre, church, house, even a jail. The latter caught the interest of the press in particular.

Being, say, ten years ahead of the layman we call this "contemporary design", while the public at least recognises it now, even though they persist in calling the work "modernistic". This direct publicity is of value to practising architects because it acquaints prospective clients with good modern design in all types of buildings. There is so much old and new ugliness in Toronto that this seems necessary. No doubt our Public Relations Committee will be arranging more displays of models and renderings by the practising members of the profession from time to time. The amount of work still required in this connection is revealed in daily business contacts – and rebuffs.

J. H. W. Bradfield

LETTER TO THE EDITOR

Sir:

Your coverage of the Massey Medals seemed to me to be first-rate – interesting, brief but adequate. The entries were most stimulating this year. My impressions were not always the same as the judges, but the general effect of this competition is certainly salutary.

I thought the most impressive building shown was the gymnasium for UBC. It seemed to me to represent a splendid architectural concept in the grand tradition, with noble proportions and exciting space relations. The jury's criticisms seemed to me a bit niggling in the face of its grandeur. The Gold Medal winner, while more beautifully and consistently finished, did not seem to me to be so exhilarating.

I, too, found the house under $15,000 surprising, and wondered if the lucky doctor achieved it by making his patients' physiotherapy take the form of mixing concrete and nailing up planks. I would have liked to see the plans of that beautiful house of Mr Porter's. I was pleased to see Gordon Adamson's apartment house recognized.

The winner among church buildings was disappointing to me. I agree that photographically the use of stone and concrete is interesting, but that is about all. The concept of a church as a long lofty hall, punctuated by vertical windows, is surely nothing new; and I am afraid that it is still being done more gracefully in traditional styles. I have not seen Gardiner and Thornton's church in Vancouver, but certainly Richard Fisher's Unitarian church is a finer piece of work, with its dignity of proportion and materials, original and sophisticated use of fountain and pylon.

Perhaps my comments are uncalled for, but I feel the Massey Medals are such a stimulus to the profession that I could not contain myself.

Yours very truly,
G. E. D. Ross

OBITUARY

Norman Whitfield Mann was born in Scheburyness, England, and came to Niagara Falls in 1919 where he was associated with C. M. Borter as a draftsman. In 1925, on the death of Mr Borter, he purchased the practice and had operated it ever since with offices at his home address. One of his last large projects was the designing of the Evening Review building.

Mr Mann was a member of the Niagara Falls Rotary Club and Lundy's Lane United Church.

John Caulfield Smith

Herbert E. Moore was a past president of the Ontario Association of Architects and a member of its Council for many years. He was also a Fellow of the RAIC. Jointly with Professor Percy Nobbs of Montreal, he was responsible for the preparation of the standard forms of contract now used throughout Canada.

Mr Moore was born in Hamilton. After World War I, he served as honorary secretary of the War Memorials Committee for Ontario. He represented the Toronto Chapter, Ontario Association of Architects, on the committee revising Toronto plumbing by-laws and represented the O.A.A. on Dominion Housing Act matters.

Since 1935, Mr Moore had been associated with the Ontario Department of Public Works. Superintendent architect and resident architect of the RCAF School at St. Thomas, he also designed the stage and background for Toronto's centennial pageant.

He was a past president of the Arts and Letters Club, and a member of Our Lady of Assumption Catholic Church.

John Caulfield Smith

BUILDING RESEARCH PUBLICATIONS

The Division of Building Research of the National Research Council is now in a position to provide through its publications useful information to members of the architectural profession in Canada. By invitation of the Editor, this general note is presented to familiarize readers of this *Journal* with the publications which are now available on building research. Further statements of this kind will be published at regular intervals with reference to additional publications as they are issued.

The general progress of the Division is reported upon regularly in a bulletin entitled *Building Research in Canada*. Each issue contains full details of all DBR publications, particulars of building research in some other country, and other information of general interest. The subscription is one dollar for four issues. Published now twice yearly, it is hoped to make this eventually a quarterly publication.

Research work of the Division is reported on in a series of Research Papers. One of these is of special interest to members of the architectural profession, since it deals with *Thermal Performance of Frame Walls*, giving particulars of research work done at the Prairie Regional Station of DBR in Saskatoon. The paper reports experiments on frame walls with aluminum foil insulation.

Technical information of general interest in the building field is being issued by the Division in a series of Technical Reports. The following are some of the subjects dealt with: *Space Requirements for Scientific Research Laboratories*, by J. L. Gray; *A Manual on the Selection and Use of Paints; A Directory of Commercial Testing Laboratories in Canada;* and a brochure giving *Over-all Heat Transmission Coefficients for Building Sections*, which includes all normal types of wall construction.

The Division publishes shorter papers of a technical character as Building Notes. Typical of the subjects dealt with are: *Notes on Vermiculite; Efflorescence on the Exterior Surface of Masonry Walls;* and *Modular Co-ordination.*

In keeping with its desire to make available all useful information on building practice from all sources, the Division has started a series of technical translations. These are generally of a highly technical character, but a list can be made available to anyone interested. Correspondingly, the Division has already issued a number of bibliographies, bringing together useful references, for convenience. One of the largest of these is a bibliography of Canadian papers of interest in building research to June 30th, 1951.

Finally, in an attempt to make available information on good building practice for the non-technical reader, the Division has started a series of pocket-size pamphlets which it is calling *Better Building Bulletins*. The first of these deals with condensation, and others are in preparation.

In order to serve the convenience of those who wish to receive more than one NRC publication, arrangements have been made for a coupon system similar to that in use by the United States Superintendent of Documents. Coupons, which may be used for the purchase of all NRC publications, are available in denominations of five, twenty-five, and fifty cents. All requests for publications should be addressed to the Publications Section, Division of Building Research, National Research Council of Canada, Ottawa, which will be glad, upon request, to add the name of any reader of this *Journal* to its regular mailing list.

R. F. Legget
Director, Division of Building Research,
National Research Council

CONTRIBUTORS TO THIS ISSUE

Henry Faulkner Brown was born in the County of Durham, England. Trained in the office of Geo. R. Smith & Partners, South Shields. Attended School of Architecture, Durham University, completing 4th year before enlisting as a private in the Durham Light Infantry. Commissioned into Royal Engineers, 1942. Commanded 1st Airborne Squadron Royal Engineers in Norway, 1945. Won immediate award of the Military Cross at Arnhem. Completed 5th year in 1946. Worked with Howard Robertson as assistant in charge of renovations to the interiors of the Savoy, the Berkeley, Claridges, and a passenger liner. Private practice for six months. Emigrated to Canada, 1947. With Mathers and Haldenby for past five and a half years, Site Architect on Bank of Nova Scotia Building Toronto.

Lewis Mumford was born in Flushing, Long Island, N.Y. While a philosopher by habit of mind and a writer by profession, he served an apprenticeship as a critic of literature, architecture, and painting, before embarking on the tetralogy (Technics and Civilization, The Culture of Cities, The Condition of Man, The Conduct of Life) for which he is chiefly known. His books on architecture are as follows: *Sticks and Stones*, 1924; *The Brown Decades*, 1931; *The South in Architecture*, 1941; while on cities and urbanism he has published *The Culture of Cities*, 1938, and *City Development*, 1945. His latest books are *Art and Technics*, 1952, and a collection of readings, to which he has contributed a long historical introduction, on *The Roots of Contemporary American Architecture*, 1952. He is currently

visiting professor at the School of Fine Arts in the University of Pennsylvania.

J. M. Richards studied at Architectural Association School of Architecture, London, 1924-29. Then spent two years studying and working in Canada and the U.S.A., including one year in the office of Messrs Sproat and Rolph of Toronto. Became assistant editor of *The Architects' Journal*, 1933, and of *The Architectural Review* in 1935 and has been largely responsible for the latter magazine ever since except for the war years. During the war was first with the Ministry of Information in London and then went to Cairo, where for three years he was Director of Publications in the Ministry of Information, Middle East. He is now joint editor of *The Architectural Review*, a member of the editorial board of *The Architects' Journal* and Architectural Correspondent of the London *Times*. He was a member of the Architecture Council of the 1951 Festival of Britain, and is a member of the executive committee of the Modern Architectural Research Group (the English branch of C.I.A.M.) and of the Royal Fine Art Commission. Is often heard on the B.B.C. Besides magazine articles on art and architecture, he is the author of several books, including the Penquin *Introduction to Modern Architecture* (1940, but about to appear in a new, revised edition), *A Miniature History of the English House*, 1938, and *The Castles on the Ground*, 1946.

SCHOLARSHIPS AND FELLOWSHIPS

The National Industrial Design Committee has announced that it will again offer scholarships, each tenable for two years and worth $1,500 annually, to graduates of recognized universities or industrial design schools who are presently doing practical design work in Canadian industry but who wish to do further study in the field of product design. Two scholarships are available this year. Applications must be received before June 10th, 1953.

The committee hopes that the awarding of these scholarships will encourage the greater use of trained Canadian talent in the industries of this country and it therefore specifies that applicants for scholarships must be Canadian citizens able to submit evidence of at least one completed design project.

Further information can be obtained by writing to Donald W. Buchanan, Secretary, National Industrial Design Committee, Design Centre, Ottawa.

Ottawa, April 9 – D. B. Mansur, president of the Central Mortgage and Housing Corporation, announced here today that eleven fellowships and five bursaries to assist those undertaking studies in Community Planning and the general field of housing and urban development would be awarded for the academic year 1953-54.

The fellowships include two senior awards in the amount of $3,000 each. Candidates for these senior fellowships must possess professional qualifications and have had administrative, teaching or research experience. These awards are intended to aid those who have already shown capacity for original work and who are able to contribute to the body of knowledge and practice in the development of Canadian housing.

Successful senior candidates must be prepared to undertake approximately a year's work, either in Canada or elsewhere, in research or study of some aspect of housing or urban development. Candidates must also be at least 25 years of age.

The remaining nine fellowships, of $1,200 each, for the study of Community Planning at the Universities of McGill, Toronto, Manitoba, or British Columbia, are available to graduates of recognized universities in the social sciences, architecture or civil engineering. Candidates are required to meet the academic qualifications of the university to which application is made and be prepared to undertake a prescribed course of studies.

Five bursaries in the amount of $800 each are offered to students who wish to undertake special studies or research in the general field of housing and urban development. Candidates must be graduates of recognized universities and their academic qualifications must meet the requirements for graduate study at the Canadian university at which they are to work.

Funds for the sixteen awards are provided under Part V of the National Housing Act.

Applications and enquiries for the two senior fellowships and five bursaries should be directed to the Chairman of the Research Committee, Central Mortgage and Housing Corporation, Ottawa. Registrars at the Universities of McGill, Toronto, Manitoba and British Columbia are prepared to provide information and accept applications for the remaining nine fellowships.

All applications and required supporting documents must be submitted not later than June 1, 1953.

The Department of Landscape Architecture in the College of Architecture at Cornell University offers a Francke Huntington Bosworth Memorial Fellowship in Landscape Architecture of One Thousand Dollars for the academic year 1953-54.

Candidates must be graduates of an accredited school of Architecture or Landscape Architecture.

The academic program will stress the relationship of Landscape Architecture to Architecture and City Planning.

The degree Master of Landscape Architecture will be granted upon satisfactory completion of the required work.

Further inquiries should be directed to Dean Thomas W. Mackesey, College of Architecture, Cornell University, Ithaca, New York.

Applications will be received until June 1, 1953.

NOTICE

The Ontario Brick Manufacturers have issued a pamphlet entitled "Suggested Precautions which may be incorporated into specifications to obtain satisfactory Masonry Walls in Ontario". The pamphlet may be obtained from the Ontario Brick Manufacturers' Association at 1305 Metropolitan Building, Toronto 1.